

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013173**Date Inspected:** 16-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

8BE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joints 047 located at CA052 bike path side of segment. Welder is identified as Mr. Yin Xiaokai (050232). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1406 repair procedure.

Y Location of repairs areas by above noted welder (050232) is located at 2800, 3180 and 3310mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joints 047 located at CA052 bike path side of segment. Welder is identified as Mr. Sun Lingling (048047). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1406 repair procedure.

Y Location of repairs areas by above noted welder (048047) is located at 4700mm and approximately 1370mm in

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

length.

7CW+7BW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 020 located at DP640-001 counter weight side of segment. Welder is identified as Mr. Yun Chuansheng (045221). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-485-SMAW-3G (3F)-FCM-Repair-1 and WR120356 repair procedure.

7CW+7DW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 006 located at OBW7B counter weight side of segment. Welder is identified as Mr. Tian Zhaoquan (045246). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR1408 repair procedure.

Y Location of repairs areas by above noted welder (058087) is located at 180 and 780mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 007 located at OBW7B counter weight side of segment. Welder is identified as Mr. Tian Zhaoquan (045246). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR1408 repair procedure.

Y Location of repairs areas by above noted welder (058087) is located at 900 and 2070mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBW7B bottom plate of segment. Welder is identified as Mr. Wang Changming (045246). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR1408 repair procedure.

Y Location of repairs areas by above noted welder (058087) is located at 4450 and 7325mm.

7CW+7BW

Shield Metal Arc Welding (SMAW) VT repair welding was performed on bottom plate t stiffeners of segment. Welder is identified as Mr. Ji Yi (045268). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

7DE+7EE

Submerge Arc Welding (SAW) welding was performed on weld joint 008 located at OBE7A deck plate of segment. Welder is identified as Mr. Gu Caihong (053748). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-223(2)1T-2.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Submerge Arc Welding (SAW) welding was performed on weld joint 008 located at OBE7A deck plate of segment. Welder is identified as Mr. Mu Jingfen (054458). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-223(2)1T-2.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and description of work are as followed:

8CE

1. Bottom plate for crossbeam 10 was moved in between panel points 68 and 70 for fit up.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations and indications are as followed:

7DE

1. The half height diaphragms on the cross beam side of segment between panel points 56 and 57.

7AW+7BW

1. Deck plate weld splice and temporary attachments on both sides of weld joint. (External)

7EE

1. Ut reject excavation in progress at the deck plate to edge plate weld joint located at the bike path side of segment. Y locations are as followed: 11780mm (2 transverse cracks), 11330~11360mm, 10820mm, 7870~8260mm, 7460~7610mm, 684mm (2 transverse cracks).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
